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geously be unsuitable for improving work efficiency. For example, the user may carry the notebook personal computer with him or her in order to process personal information. In this example, information stored in the notebook personal computer may be shown to a person different from the user. In some cases, a person different from the user may be allowed to perform a simple operation to execute a specified process on the basis of a procedure stored in a server on the network to which the notebook personal computer is connected, thus providing outputs constituting services. In other cases, subsequent business activities for articles or insurances may be based on these outputs. In such an example, not all the keys of the keyboard are required in the site where the user carries the notebook personal computer with him or her. Further, the client may provide incorrect input. If it is inconvenient to be able to use all the key inputs, the notebook personal computers manufactured by the current techniques offer no solutions. The possibility of incorrect operations can be reduced by allowing the client to operate only the previously described touch panel-installed display. However, the presence of the keyboard may hinder fundamental solutions. To solve this, a portable personal computer has been provided which has no keyboard and which is composed of an externally rectangular housing comprising a display and the minimum required input device such as a power supply switch. However, adapting the hardware only to a particular situation may degrade general-purpose properties. Specifically, when the user carries the apparatus to the client with him or her and if the client suddenly changes the contents of the operation, it is difficult to deal with this change with the above computer. Further, the user normally places paper flat on the desk when writing characters on the paper with a pencil. When reading a book, the user holds the book in his or her hand so that his or her line of sight is perpendicular to the print surface of the book. As is apparent from this behavior, the angle of a plane at which the user can easily input characters with his or her finger or a pen is different from that of a plane at which the user can easily read information displayed on the plane. This may disadvantageously tire the user. Moreover, for the electronic apparatuses, the user interface desirably meets users' individual requirements. That is, the input device needs to flexibly conform to the physical properties or preferences of users. It is well known that the size of each part of the human body varies. The input device such as a common keyboard or mouse has fixed dimensions. Consequently, a comfortable work environment cannot be realized unless the user prepares an input device of a size suitable for himself or herself. However, in the notebook personal computer, the keyboard is integrated with the main body. Thus, disadvantageously, the user cannot adjust the key pitch or arrangement.

The interface for the electronic apparatus can desirably provide a quieter environment. That is, when the user inputs characters from the keyboard, typing sounds occur. Accordingly, the keyboard is inconvenient for taking notes in a situation where making noise is not preferable, for example, in a library or during a class in school. It is thus desirable to enable input while maintaining a quiet environment.

BRIEF SUMMARY OF THE INVENTION

It is an object of the present invention to provide an electronic apparatus which is excellent in portability, operability, visibility, and reliability.

According to an aspect of the present invention, there is provided an electronic apparatus comprising:

a first display device comprising a first housing and a first display screen which is held in the first housing;

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a second display device comprising a second housing and a second display screen which is received and held in the second housing, the second display screen comprising a sensor which generates a sensor output signal depending on an input on the second display screen;

a connecting mechanism configured to connect the first and second housings together and capable of adjusting an opening angle of the first housing with respect to the second housing;

a display processing section configured to display a first display image on the first display screen and a first interface image on the second display screen;

a determining section configured to determine an instruction to the interface image on the basis of the sensor output signal; and

a control section configured to control the display processing section in response to the instruction to cause a second display image to be displayed in place of the first display image and control the display processing section in response to the instruction to cause a second interface image to be displayed in place of the first interface image.

According to another aspect of the present invention, there is provided a foldable display device comprising:

a first device having a first display screen to display application images;

a second device having a second display screen to display interface images and an input sensor provided around the second display screen to sense an input position of touching or a movement on the second display screen;

a connecting mechanism configured to arbitrarily set an angle of the first display screen of the first device and the second display screen of the second device and to be capable to be folded;

an input processor to converting an input position sensed by the sensor into an input data to the display processor, and

a display processor to generate application images to be displayed on the first display screen and interface images to be displayed on the second display screen,

wherein the display processor generates a first interface image indicating distinctly displaying the input position after receiving the input data on the second display screen, and generates a first application image reflecting the input data on the first display screen.

According to yet another aspect of the present invention, there is provided a portable computer, comprising:

a flat panel having a first display panel and a second display panel, that is foldable along a centerline and that a surface of the second display panel approaches to a surface of the first display panel when they are folded;

a touch panel sensor provided at least on a second display panel to detect a user's input operation;

a display processor to supply display data to the first display panel and the second display panel; and

a display controller to control the display processor in at least two modes comprising,

a first mode where the display processor supplies an application image to the first display panel while supplying an interface image to the second display panel so as to use the second display panel as an input device, and

a second mode where an application image is divided into two part and one part of the application image is supplied to the second display panel and the other part of the application image is supplied to the first display panel so as to use the first and second display panels as a one extended screen.